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Date of mailing (*day/month/year*)
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Applicant

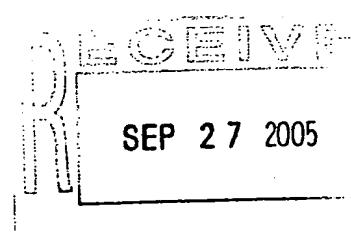
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA et al

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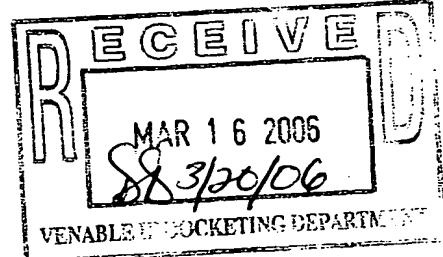
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- (74) Agents: DALEY, Henry, J. et al.; Venable LLP, P.O. Box 34385, Washington, DC 20043-9998 (US).

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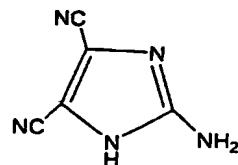
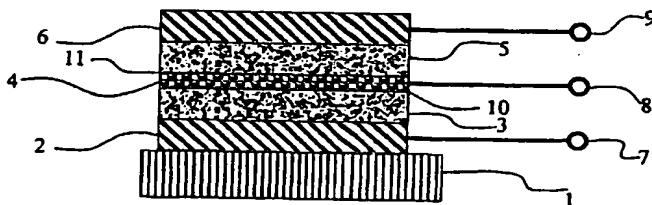
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: THREE-TERMINAL ELECTRICAL BISTABLE DEVICES



(57) Abstract: A three terminal electrical bistable device that includes a tri-layer composed of an electrically conductive mixed layer sandwiched between two layers of low conductivity organic material that is interposed between a top electrode and a bottom electrode. The conducting mixed layer serves as the middle electrode. The device includes two memory cells composed of electrode/organic layer/mixed layer, where the interfaces between the electrically conductive mixed layer and the low conductivity organic layer exhibit bistable behavior.

WO 2005/086627 A3

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/40368

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H01L 33/00; H04N 15/00
US CL : 257/88; 345/97, 81, 204, 206

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 257/88; 345/97, 81, 204, 206

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-----------------------|
| X | US 6,600,473 (Kobayashi et al.) 29 July 2003 (29.07.2003) figs. 1 - 6; column 6, lines 40 - 67; column 7, lines 49 - 57; column 8, lines 18 - 29 and lines 41 - 64; column 12, lines 34 - 67; column 13, lines 1 - 65; column 15, lines 6 - 67) | 1 - 16 |
| Y | US 4,507,672 (Potember et al.) 26 March 1985 (26.03.1985) fig. 1. | 1 - 16 |
| Y | US 2002/0031602 A1 (Zhang) 14 March 2002 (14.03.2002); fig. 1, paragraphs [0010], [0028], [0062] and [0069] | 1 - 11 |

Further documents are listed in the continuation of Box C.

See patent family annex.

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| "P" document published prior to the international filing date but later than the priority date claimed | | |

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